

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION OF

Confirmation No. 7969

Darrell R. ANDERSON et al.

Group Art Unit: 1644

Application Serial No. 10/073,138

Examiner: Phillip Gambel

Filed: February 13, 2002

Title: IDENTIFICATION OF UNIQUE BINDING INTERACTIONS BETWEEN CERTAIN

ANTIBODIES AND THE HUMAN B7.1 AND B7.2 CO-STIMULATORY ANTIGENS

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. §.1.56, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached Form PTO-1449. Unless otherwise indicated herein, one copy of each reference is attached. It is respectfully requested that the listed references be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue there from.

This Information Disclosure Statement is being filed before the mailing date of the first official action on the merits in the present application. No certification or fee is required, pursuant to 37 C.F.R. §1.97(b)(3),

Respectfully Submitted,

Thomas A. Cawley, Jr., Ph.D. Registration Number 40,944

-A Cewy /

Date: October 19, 2004

PILLSBURY WINTHROP LLP

Telephone: (703) 905-2000 Facsimile: (703) 905-2500

P.O. Box 10500 McLean, VA 22102

TAC/CR/sm

FORM PTO	D-1449	(modified)	OT PE 2000	FROE LLY	-	Atty. Ref. No 037003-0280			ent R 95-30	ef. -0233	 CP3			
INFORMAT BY APPLIC		DISCLOSURE ST	ATEMENT TRADE			Applicant:	ANDERSON	et al.						
						Appln. No.:	10/073,138							
						Filing Date:	February 13	, 2002			_			
Date: Octo	ber 15	, 2004	Page 1 of 2			Examiner:	Gambel, P.	Group Art	Unit:	164	44			
U.S. PATE	NT DC	CUMENTS												
Examiner's		Document						Class	Sub	1		Filing Date		
Initials*		Number	MM/YYYY	(Family Name of		First Inventor		Cla	priate)					
	AR	5,304,635	04/1994	Imam										
	BR			ļ										
	CR										<u> </u>			
FOREIGN PATENT DOCUMENTS					•		English Abstract		Translation Readily Available					
		Document	Date MM/YYYY	Country	Inve	ventor Name								
		Number			\		ļ	-						
					ļ	 		Enclosed	No	Enclo	se	No		
	DR				-	-			-			ļ		
	ER		1		-			-	-	-		ļ		
	FR		<u> </u>		<u> </u>			<u> </u>	 	 	/ = 1.	<u> </u>		
OTHER (In	T	g in this order Aut								<u> </u>		<u> </u>		
	GR						the activating a ol., 1992, 148:3		suppr	essive	prope	rties		
	HR						Primary Alloge		rative	Resp	onses	and		
							J. Exp. Med.,							
IR			Azuma M., et al., "Functional Expression of B7/BB1 on Activated T Lymphocytes," J. Exp. Med., 1993, 177:845-850.											
	JR	Azuma M.D	., et al., "B70 <i>i</i>	Antigen is a S	Secor	nd Ligand for (CTLA-4 and CE	028," Natui	re, 19	93, 36	3:76-79	9.		
	KR						express three C 1993, 90:1105		nter-re	ecepto	s that	CO-		
LR		Cohen J., "I	Cohen J., "Mounting a targeted strike on unwanted immune responses," (news; comment), Science, 1992,											
	MR	3	et al., "Functi /, 1992, 22:30		teriza	tion of a Nove	el Anti-B7 Mono	clonal Antil	oody,"	Eur.	Journa	l of		
	NR				ary fo	or the war on o	cancer," Biotec	hnology, 19	94, 12	2:320.				
	OR		"The B7-2 (B7 differentiation	,	•	•	essed by mono 2-1407.	ocytes and	activte	ed B lyı	nphoc	ytes		
	PR	Freeman G		LA-4 and CD	28 M	RNA are Coe	xpressed in Mo	st T Cells A	After A	ctivati	on," Th	пе		
	QR						nmune Toleran	ce," Immur	ology	Today	/, 1993	3,		
	RR	Gimmi C.D.	, et al., "Huma on," Proc. Na				ced by Antigen :	Presentatio	n in th	ne Abs	ence c	of B7		
	SR	Gribben J.C					poptosis of hur	nan T cells	." Prod	c. Natl.	. Acad.	Sci.		
	TR	Grumet F.C					Antigen Specific 34.	ally Suppre	esses	Humo	ral			
	UR	Harding F.A		28 Mediated	Signa	Illing Co-stimu	ılates Murine T	Cells and I	Preve	nts Ind	uction	of		
	VR	Hart D.N.J.,		3-1 is a Leuce	ocyte	Differentiation	n Antigen on Hu	ıman Dend	ritic C	ells In	duced	by		
	WR	Ionescu-Tir		"Correlations	betw	een insulin ar	ntibodies and th	ne HLA syst	tem in	a gro	Jp of T	уре I		

XR	Janeway C.A., Jr. and K. Bottomly, "Signals and Signs for Lymphocyte Responses," Cell, 1994, 76.275-285.							
YR	Jenkins M.K., "The Role of Cell Division in the Induction of Clonal Anergy." Immunology Today, 1992, 13:69.							
ZR	June C.H., et al., "The B7 and CD28 receptor families," Immunol Today, 1994, 15:321-331.							
AAR	Krummel M., et al., "CD28 and CTLA-4 have opposing effects on the response of T cells to stimulation," J. Exp. Med. 1995, 182:459-466.							
STPE BBR	LaSalle J.M., et al., "Early signaling defects in human T cells anergized by T cell presentation of autoantigen," J. Exp. Med., 1992, 176:177-186.							
nct 1 9 2000 CB	Lenschow D.J., et al., "Long-Term Survival of Xenogeneic Pancreatic Islet Grafts Induced by CTLA-4lg," Science, 1992, 257:789-795.							
THAT EER	Lenschow D.J., et al., "Expression and Functional Significance of an Additional Ligand for CTLA-4," P. Natl. Acad. Sci., USA,,1993, 90:11054-11058.							
EER EER	Lin H., et al., "Long-term Acceptance of Major Histocompatibility Complex Mismatched Cardiac Allograft Induced by CTLA-4-Ig Plus Donor Specific Transfusion," J. Exp. Med., 1993, 178:1801.							
FFR	Linsley, P.S., et al., "CTLA-4 is a Second Receptor for the B Cell Activation Antigen B7," J. Exp. Med., 1991, 174:561.							
GGR	Linsley P.S., et. al., "T-Cell Antigen CD28 Mediates Adhesion with B Cells by Interacting with Activat Antigen B7/BB-1." Proc. Natl. Acad. Sci., 1990, 87:5031-5035.							
HHR	Linsley, et al, "CD28 Engagement by B7/BB-1 Induces Transient Down-Regulation of CD28 Synthesis Prolonged Unresponsiveness to CD28 Signaling," The Journal of Immunology, 1993, 150:3161-3169							
IIR	Linsley, et al., "Binding of the B cell activation antigen B7 to CD28 costimulates T cell proliferation and interleukin 2 mRNA accumulation," J. Exp. Med., 1991, 173:721-730.							
JJR	Linsley P.S., et. al., "Coexpression and Functional Cooperation of CTLA-4 and CD28 on Activated T Lymphocytes." J. Exp. Med., 1992, 176:1595-1604.							
KKR	Morton P.A., et al., "Differential effects of CTLA-4 substitutions on the binding of human CD80 (B7-1) and CD86 (B7-2)," J. Immunol., 1996,156:1047-1054.							
LLR	Nestle F.O., et al, "Characterization of dermal dendritic cells in psoriasis," J. Clin. Invest., 1994, 94: 202-209.							
MMR	Schwartz R.H., "Co-stimulation of T lymphocytes: The role of CD28, CTLA-4, and B7/BB1 in interleukin-production and immunotherapy," Cell, 1992, 71:1065-1068.							
NNR	Schwartz R.H., "A cell culture model for T lymphocyte clonal anergy," Science, 1990, 248:1349-1356.							
OOR	Selvakumar,A., et al., "Genomic organization and chromosomal location of the human gene encoding the B-lymphocyte activation antigen B7," lmmunogenetics , 1992, 36:175-181							
PPR	Tan P., et al., "Induction of Alloantigen-specific Hyporesponsiveness in Human T Lymphocytes by Blockin Interaction of CD28 with Its Natural Ligand B7/BB1," J. Exp. Med., 1993, 177:165-173.							
QQR	Tivol E.A., et al., "Loss of CTLA-4 leads to massive lymphoproli-feration and fatal multiorgan tissue destruction, revealing a critical negative regulatory role of CTLA-4," Immunity, 1995, 3:541-547.							
RRR	Turka L.A., et al., "T-cell activation by the CD28 ligand B7 is required for cardiac allograft rejection in vivo," Proc. Natl. Acad. Sci., USA, 1992, 89:11102-11105.							
SSR	Toubert A., et al., "Epitope mapping of an HLA-B27 monoclonal antibody that also reacts with a 35-kD bacterial out-membrane protein," Clin. Exp. Immunol., 1990, 82(1), 16-20.							
TTR	Toubert A., et al., "Epitope mapping of HLA-B27 and HLA-B7 antigens by using intradomain recombinants, J. Immunol., 1988, 141(7), 2503-9.							
UUR	Valle et al., "mAb 104, a new monoclonal antibody, recognizes the B7 antigen that is expressed on activated B cells and HTLV-1-transformed T cells," lmmunol. , 1990, 69(4), 531-535.							
VVR	Vandenberghe P., et al "Antibody and B7/BB1-mediated ligation of the CD28 receptor induces tyrosine phosphorylation in human T cells," J. Exp. Med., 1992, 175:951-960.							
WWR	van der Merwe, et al., "CD80 (B7-1) binds both CD28 and CTLA-4 with a low affinity and very fast kinetics, J. Exp. Med., 1997,185: 393-403.							
XXR	Weyl D., et al., "Epitope mapping of human monoclonal antibodies to HLA-B27 by using natural and mutated antigenic variants," Hum. Immunol., 1991, 31(4), 271-276.							
	Zavazava N., et al, "Inhibition of anti-HLA-B7 alloreactive CTL by affinity-purified soluble HLA," Transplantation, 1991, 51(4), 838-42.							

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

PAT-1449 12/98